

# FOCUS on

BUILDING  
NUMBER SENSE



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# INTRODUCTION

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## What is the *FOCUS* series?

*FOCUS* is a mathematics-strategy practice series. Each student book in the series provides brief instruction and concentrated practice for students in one targeted Mathematics Strategy. *FOCUS* also allows students the opportunity for self-assessment of their performance. It allows teachers the opportunity to identify and assess a student's level of mastery.

### 6 Mathematics Strategies featured in the *FOCUS* series:

- Building Number Sense
- Using Estimation
- Using Algebra
- Using Geometry
- Determining Probability and Averages
- Interpreting Graphs and Charts

The *FOCUS* series spans eight grade levels, from first grade through eighth grade. The introductory passages in each lesson are written at or below grade level, allowing students to focus on the mathematics without struggling with the reading.

Book	Reading Level
Book A	at or below 1st grade readability
Book B	at or below 2nd grade readability
Book C	at or below 3rd grade readability
Book D	at or below 4th grade readability
Book E	at or below 5th grade readability
Book F	at or below 6th grade readability
Book G	at or below 7th grade readability
Book H	at or below 8th grade readability

## What is Building Number Sense, the Mathematics Strategy featured in this *FOCUS* book?

Number sense is an understanding of numbers and the relationships between them. As students build number sense, they become familiar with a variety of representations for whole numbers and parts of whole numbers.

Students learn to express numbers in a variety of forms. Three common ways to express numbers are in standard form, in word form, and in expanded form. Students in the upper grades learn to use exponents, in addition to the other common forms, to express numbers.

Students in grades 1 to 3 develop counting skills and become familiar with ordinal numbers. They practice counting to identify numbers that come before or after another number. They also learn to use ordinal numbers to identify an item's position in a row or a list.

Students in grades 4 through 8 learn several ways to represent the parts of a whole. Students in grade 4 are introduced to fractions. They learn to understand the parts of a fraction and to recognize the quantity represented by a fraction. Students in the upper grades examine the relationship between fractions, decimals, and percents. They also learn to perform mathematical operations with fractions and decimals.

Students in grade 8 are introduced to prime and composite numbers, and they learn to determine a number's prime factorization. They also practice following the order of operations when solving problems with parentheses, exponents, or square roots.

## What is in each student book?

There are 48 student books in the *FOCUS* series. There is one student book for each of the 6 Mathematics Strategies, at each of the 8 mathematics levels. Each student book contains:

- *To the Student*  
This introduces the program and should be read and discussed with students to make sure they understand what they are to do in the book.
- *Table of Contents*
- *Learn About (Modeled Practice)*  
These two pages provide basic instruction and modeling in the understanding and application of the Mathematics Strategy. The Learn About should be read and discussed with students to make sure they understand the Mathematics Strategy. Additional tips for helping students understand and use the Mathematics Strategy are included in the Mathematics Strategy Tips for the Teacher on pages 12–13 of this teacher guide.
- *Lesson Preview (Guided Practice)*  
These two pages include a sample problem and two selected-response questions with explanations of why each of the eight answer choices is correct or not correct. The Lesson Preview should be read, worked through, and discussed with students to make sure they understand how to answer strategy-based questions.
- *20 Lessons (Independent Practice)*  
Each two-page lesson contains one passage, four strategy-based selected-response questions, and one strategy-based constructed-response writing question.

**Selected-response questions:** In each lesson, students apply the Mathematics Strategy and then choose the correct answers for four selected-response (multiple-choice) strategy-based questions. You should model how to answer these kinds of questions using information on the Lesson Preview pages.

**Constructed-response writing questions:** In each lesson, students apply the Mathematics Strategy to solve a strategy-based question. You should model how to answer these kinds of questions by using one of the sample answers provided in the Answer Key.

- *Tracking Chart*  
Students use this chart for noting their completion of and performance in each lesson.
- *Self-Assessments*  
These five forms allow students the opportunity for self-assessment of their performance.
- *Answer Form*  
Students may use this form to record their answers to the eighty selected-response questions and to indicate that they have answered each of the twenty constructed-response writing questions.

# Teacher Assessment 3

(See Teacher Assessment 3 on page 7 of this teacher guide.)

Student's Name: \_\_\_\_\_ Date: \_\_\_\_\_

Teacher's Name: \_\_\_\_\_

**Performance Notes:**

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**Action Plan:**

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**Progress Notes:**

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